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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,877	05/25/2001	Alain Forestiere	PET-1936	2231
23599	7590	03/16/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			PASTERCZYK, JAMES W	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,877

Applicant(s)

FORESTIERE ET AL.

Examiner

J. Pasterczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 12-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 12-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This Office action is in response to the amendment filed 2/17/04 and refers to the first Office action mailed 11/19/03.

2. The bulk of the formal objections and rejections are overcome. However, c.f. below for new or maintained grounds of rejection.

3. The abstract of the disclosure is objected to because it is not clear what is bonded via phosphorus and oxygen atoms to the mineral oxide. Correction is required. See MPEP § 608.01(b).

4. Claims 1, 2 and 12-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, l. 2-3, it is not really clear what is bonded to what via what; is it the entire group containing sulfur, the hydrocarbon chain and phosphorus that is bonded directly, i.e. no other intervening atoms, to the mineral oxide, but then again if it is bonded via phosphorus and oxygen atoms to the mineral oxide is it the same phosphorus atom required in the groups of the first line and why isn't the oxygen atom required in the first group? And how does this relate to the various O, P and M atoms recited in the latter half of the claim? Perhaps a structural diagram would help, at least in the amendment if not necessarily in the claims.

In claim 12, the contemporary and unambiguous version of the periodic table no longer uses A and B; instead it numbers the chemical groups 1-18 serially across the table with the lanthanides and actinides considered as two separate groups. Hence it is not clear what the difference is between e.g. 3A and 3B here.

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In claim 17 the axial bonds from the phosphorus atom should go directly to the OX and O groups respectively, not at a skewed angle.

In claim 18, l. 9, delete "sulfur-containing group which is a" as a broader range followed by the narrower range immediately after it.

In claim 21, last line, change "alkyl compound" to --alkylene group-- since this fragment is not itself a compound but must be divalent.

The examiner further notes that in claims 15 and 16 commas are inserted using brackets; this seems to be the obsolete method of denoting added matter to claims; the current method is to underline it.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 2 and 12-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Alberti, Dines, Calhoun, Wieserman, or Corriu as cited in the first Office action.

The disclosures of the references have been discussed in the previous Office action.

The reference lacks the new limitation of their materials being prepared by gel formation.

However, sol-gel processing is a conventional means of making solid state ceramic adsorbents and catalysts.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosures of any of the primary references with a reasonable expectation of obtaining a highly-useful adsorbent with the expected benefit of being able to use conventional means to prepare said adsorbent.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Pasterczyk

AU 1755

3/11/04



Mark L. Bell
Supervisory Patent Examiner
Electronic Business Center 1700